

AMENDMENTS TO THE CLAIMS

Please amend claim 5 as follows.

The following listing of claims replaces all versions, and listings, of claims in this application.

Listing of Claims:

1-4. (Canceled)

5. (Currently Amended) A method of simultaneously depositing at least two different vapor materials on a single substrate, the method comprising:

providing at least two vapor sources, each vapor source having a planar face;

positioning a mask between each of said at least two vapor sources and said substrate, such that there is a separate mask between each vapor source and said substrate, each mask being positioned in a first plane that is parallel to a plane defined by the substrate, wherein for each mask a second plane is defined by the center of the associated vapor source, the center of the substrate and an edge of the mask;

vaporizing a different material from said face of each of said vapor sources; and

depositing the vaporized material from each vapor source onto the substrate, wherein the path of the vaporized material from each vapor source to the substrate is partially interrupted by a corresponding mask,

wherein each mask is positioned in said first plane such that the vaporized material is deposited on the substrate in a thickness that varies progressively so as to increase which increases substantially continuously in a direction along the substrate;

wherein each mask is positioned such that its intersection with the second plane lies within the quadrilateral area of the second plane defined by the points of the extremities of the substrate lying within the second plane and the points of the extremities of the source lying within the second plane; and

wherein each mask is further positioned such that the first plane is at a perpendicular distance of greater than H_y from the plane defined by the substrate, wherein H_y is given by:

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$$H_y = \frac{(E + F)A}{A + C}$$

wherein for each mask and its associated vapor source:

E is the source to mask distance, said distance being defined as the perpendicular distance from the source to the first plane;

F is the mask to substrate distance, said distance being defined as the perpendicular distance from the first plane to the plane defined by the substrate;

A is the substrate size, said substrate size being defined as the distance between the points of the extremities of the substrate lying within the second plane; and

C is the source size, said source size being defined as the distance between the points of the extremities of the source lying within the second plane; and

wherein each mask is moveable prior to commencing deposition in order to pre-determine the gradient of deposition of each material but is not moved in the course of the deposition method.

6. (Previously Presented) The method of claim 5, wherein, for each mask and its associated vapor source, the edge of the mask intersecting the second plane is within the triangular area of the second plane defined by the points of the extremities of the source lying within the second plane and a point H lying within the second plane,

wherein the point H has the coordinates H_x, H_y with respect to the center of the substrate within the second plane, the x-axis being defined by the intersection of the substrate face with the second plane and the y-axis being perpendicular thereto and within the second plane, and wherein H_y is as defined in claim 5 and H_x is given by:

$$H_x = \frac{AD}{A + C}$$

wherein:

A and C are as defined in Claim 1 claim 5; and

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D is the offset of the source with respect to the substrate, said offset being defined as the distance between the y-axis and the parallel axis containing the center of the source.

7. (Canceled)